

We claim:

1 1. A carriage for use in an image forming device
2 including a rail, the carriage comprising:

3 a printing component support; and

4 a pair of bushings associated with the printing
5 component support, each bushing including an inner region
6 with at least three spaced rail contact regions separated
7 by respective non-contact regions.

1 2. A carriage as claimed in claim 1, wherein the
2 printing component support is adapted to support at least
3 one printhead cartridge.

1 3. A carriage as claimed in claim 1, wherein the
2 at least three spaced rail contact regions comprise at
3 least four spaced rail contact regions.

1 4. A carriage as claimed in claim 1, wherein the
2 at least three spaced rail contact regions comprise
3 substantially planar surfaces.

1 5. A carriage as claimed in claim 1, wherein the
2 at least three spaced rail contact regions are equally
3 spaced.

1 6. A carriage as claimed in claim 1, further
2 comprising:

3 an anti-rotation pin associated with the
4 printing component support.

1 7. A carriage as claimed in claim 1, wherein the
2 printing component support and bushings together define a
3 unitary structure.

1 8. A carriage for use in an image forming device
2 including a rail and adapted to operate in a plurality of
3 intended orientations, the carriage comprising:

4 a printing component support; and
5 a pair of bushings associated with the printing
6 component support, each bushing including an inner region
7 with a plurality of rail contact region pairs, the number
8 of rail contact region pairs being equal to the number of
9 intended orientations, each rail contact region pair
10 including a two rail contact regions separated by a non-
11 contact region.

1 9. A carriage as claimed in claim 8, wherein the
2 printing component support is adapted to support at least
3 one printhead cartridge.

1 10. A carriage as claimed in claim 8, wherein the
2 number of intended orientations is equal to four and the
3 number of rail contact region pairs is equal to four.

1 11. A carriage as claimed in claim 8, wherein the
2 rail contact region pairs include planar surfaces.

1 12. A carriage as claimed in claim 8, wherein the
2 plurality of rail contact region pairs are equally
3 spaced.

1 13. A carriage as claimed in claim 8, further
2 comprising:

3 an anti-rotation pin associated with the
4 printing component support.

1 14. An image forming device as claimed in claim 8,
2 wherein adjacent pairs of rail contact region pairs
3 include a common rail contact region.

1 15. A carriage as claimed in claim 8, wherein the
2 printing component support and bushings together define a
3 unitary structure.

1 16. An image forming device, comprising:
2 a printing component support;
3 a guide rail; and
4 a pair of bushings associated with the printing
5 component support and through which the guide rail
6 extends, each bushing including an inner region with at
7 least three spaced rail contact regions separated by
8 respective non-contact regions.

1 17. An image forming device as claimed in claim 16,
2 wherein the printing component support is adapted to
3 support at least one printhead cartridge.

1 18. An image forming device as claimed in claim 16,
2 wherein the at least three spaced rail contact regions
3 comprise at least four spaced rail contact regions.

1 19. An image forming device as claimed in claim 16,
2 wherein the at least three spaced rail contact regions
3 comprise substantially planar surfaces.

1 20. An image forming device as claimed in claim 16,
2 wherein the at least three spaced rail contact regions
3 are equally spaced.

1 21. An image forming device as claimed in claim 16,
2 further comprising:

3 a substantially c-shaped guide; and
4 an anti-rotation pin associated with the
5 printing component support within the c-shaped guide.

1 22. An image forming device as claimed in claim 16,
2 wherein the printing component support and bushings
3 together define a unitary structure.

1 23. An image forming device adapted to operate in a
2 plurality of intended orientations, the image forming
3 device comprising:

4 a printing component support;
5 a guide rail; and
6 a pair of bushings associated with the printing
7 component support and through which the guide rail
8 extends, each bushing including an inner region with a
9 plurality of rail contact region pairs, the number of rail
10 contact region pairs being equal to the number of
11 intended orientations, each rail contact region pair
12 including a two rail contact regions separated by a non-
13 contact region.

1 24. An image forming device as claimed in claim 23,
2 wherein the printing component support is adapted to
3 support at least one printhead cartridge.

1 25. An image forming device as claimed in claim 23,
2 wherein the number of intended orientations is equal to
3 four and the number of rail contact region pairs is equal
4 to four.

1 26. An image forming device as claimed in claim 23,
2 wherein the rail contact region pairs include planar
3 surfaces.

1 27. An image forming device as claimed in claim 23,
2 wherein the plurality of rail contact region pairs are
3 equally spaced.

1 28. An image forming device as claimed in claim 23,
2 further comprising:

3 a substantially c-shaped guide; and
4 an anti-rotation pin associated with the
5 printing component support within the c-shaped guide.

1 29. An image forming device as claimed in claim 23,
2 wherein adjacent pairs of rail contact region pairs
3 include a common rail contact region.

1 30. An image forming device as claimed in claim 23,
2 wherein the printing component support and bushings
3 together define a unitary structure.